Title (en)

DIFFUSING ALPHA-EMITTER RADIATION THERAPY FOR PANCREATIC CANCER

Title (de)

LICHTSTREUENDE ALPHA-EMITTERSTRAHLUNGSTHERAPIE FÜR PANKREASKREBS

Title (fr)

RADIOTHÉRAPIE PAR ÉMETTEUR ALPHA DE DIFFUSION POUR LE CANCER DU PANCRÉAS

Publication

EP 4101505 A1 20221214 (EN)

Application

EP 22178060 A 20220609

Priority

US 202117343779 A 20210610

Abstract (en)

A diffusing alpha-emitter radiation therapy (DaRT) source for use in treatment of a pancreatic cancer tumor of a patient, the source comprising a support having a length of at least 1 millimeter; and radium-224 atoms coupled to the support such that not more than 20% of the radium-224 atoms leave the support into the tumor in 24 hours, without decay, when the source is implanted in the tumor, but upon decay, at least 5% of daughter radionuclides of the radium-224 atoms leave the support upon decay. The administration pattern of the source comprises implanting the source in the pancreatic cancer tumor throughout the tumor, with a spacing between the sources of between 3-4.5 millimeters, and the radiation therapy source has a radon release rate of between 1.2 and 2.5 microcurie per centimeter length.

IPC 8 full level

A61N 5/10 (2006.01)

CPC (source: EP US)

A61N 5/1007 (2013.01 - US); **A61N 5/1027** (2013.01 - EP); **A61N 5/103** (2013.01 - EP); A61N 2005/1024 (2013.01 - EP); A61N 2005/1087 (2013.01 - EP); A61N 2005/1098 (2013.01 - US)

Citation (applicant)

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- WO 2021050034 A1 20210318 - HEWLETT PACKARD DEVELOPMENT CO [US]
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Citation (search report)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 22178060 A 20220609; AU 2022204083 A 20220610; AU 2024202339 A 20240411; CN 202280005649 A 20220608; IB 2022055324 W 20220608; JP 2022093361 A 20220608; TW 111121571 A 20220610; US 202117343779 A 20210610